

2018 Current Fiscal Year Report: Information Systems Technical Advisory Committee

Report Run Date: 06/05/2019 03:57:20 AM

1. Department or Agency

Department of Commerce

2. Fiscal Year

2018

3. Committee or Subcommittee

Information Systems Technical Advisory Committee

3b. GSA Committee No.

2075

4. Is this New During Fiscal Year?

No

5. Current Charter

03/21/2017

6. Expected Renewal Date

03/21/2019

7. Expected Term Date

8a. Was Terminated During Fiscal Year?

No

8b. Specific Termination Authority

8c. Actual Term Date

9. Agency Recommendation for Next Fiscal Year

Continue

10a. Legislation Req to Terminate?

No

10b. Legislation Pending?

Not Applicable

11. Establishment Authority Statutory (Congress Created)

12. Specific Establishment Authority

50 USC. app. 4604(h), as continued by EO 13222 (as amended by E.O. 13637)

13.

Effective Date

07/12/1985

14.

Committee Type

Continuing

14c.

Presidential?

No

15. Description of Committee Scientific Technical Program Advisory Board

16a. Total Number of Reports

No Reports for this Fiscal Year

17a. Open 0 17b. Closed 0 17c. Partially Closed 3 17d. Total 3

Meetings and Dates

Purpose	Start	End
To discuss Basic Buffer Overflows, Working Group Reports, NIST IoT Cybersecurity Program, and Industry Wassenaar Proposals for 2018	11/01/2017	11/02/2017
Learnings from Semiconductor and Device Roadmaps 10, 7 5mm and beyond, Industry Wassenaar Proposals for 2019 and Working Group Reports	04/25/2018	04/26/2018
To discuss Intro to hacking? Tools? and Trends?, Working Group Reports, Update on Practitioners Guide to APP, Update on Top 500, Digital TV? Implications for 5G video?, Industry Wassenaar Proposals for 2019, and Clash between GDPR (EU) and 5A1j (WA).	07/25/2018	07/26/2018

Number of Committee Meetings Listed: 3

	Current FY	Next FY
18a(1). Personnel Pmts to Non-Federal Members	\$0.00	\$0.00
18a(2). Personnel Pmts to Federal Members	\$0.00	\$0.00
18a(3). Personnel Pmts to Federal Staff	\$30,300.00	\$30,300.00
18a(4). Personnel Pmts to Non-Member Consultants	\$0.00	\$0.00

18b(1). Travel and Per Diem to Non-Federal Members	\$0.00	\$0.00
18b(2). Travel and Per Diem to Federal Members	\$0.00	\$0.00
18b(3). Travel and Per Diem to Federal Staff	\$0.00	\$0.00
18b(4). Travel and Per Diem to Non-member Consultants	\$0.00	\$0.00
18c. Other(rents,user charges, graphics, printing, mail, etc.)	\$4,245.00	\$4,245.00
18d. Total	\$34,545.00	\$34,545.00
19. Federal Staff Support Years (FTE)	0.30	0.30

20a. How does the Committee accomplish its purpose?

The Information Systems Technical Advisory Committee (ISTAC) focused on the following issues in FY2018: Developed Wassenaar proposals for issues related to Categories 3, 4, 5p1 and 5p2, and provide support as necessary for proposals that are advanced to Wassenaar. At the date of the FY2017 Annual Report, there were 12 Wassenaar proposals in Categories 3, 4, 5 that were either initiated by the ISTAC or were developed jointly by the U.S. Government (USG) and the ISTAC that were still open (list below). Eleven of those 12 proposals were agreed to at the October 2017 Wassenaar Experts Group (EG) meeting; they were: US-001 (4D4/4E Intrusion Software); US-003 (Cat 2 and 3 Linear and displacement measuring instruments); US-006 (Category 3 Definitions); US-008 (3A1b4 Solid State Amplifiers); US-009 (3A1e Primary Cells Threshold); US-011 (3B1f EUV Substrate Blank); US-012 (3B2 Semiconductor Test Equipment); US-013 (Category 4 Definitions); US-014 (4A3b/4E1b APP Thresholds); US-015 (5A1d Antenna Decontrol Note); US-021 (Definitions – Deletion of unused global definitions). The US-007 (3A1a12 Fast Fourier Transform Processors) was not agreed. The 2018 slate of US proposals to Wassenaar included six proposals in Categories 3, 5p1, 5p2 (there were no proposals in Category 4) that were either initiated by the ISTAC or were developed jointly by USG and the ISTAC. These six proposals are: US-002 (5A2 Clarification of Internet of Things); US-004 (3A1a5/3A1a14/3A2h ADC Thresholds); US-005 (3A1a5b DAC Overlapping Entries); US-006 (3A1b Wafer Clarification Note); US-008 (3A2d Vector Modulation and Modulators); and US-009 (5p2 “Cryptographic Activation” simplification). Of these six proposals, only one (US-005) was agreed to during the April 2018 Wassenaar EG meeting; such rapid agreement speaks to the quality and relevance of the proposal. The other five proposals remained open at the date of this Annual Report and will be further discussed at the October 2018 Wassenaar EG meeting. Multiple teleconferences, email exchanges and some meetings between ISTAC industry members and USG were required through the summer to provide BIS with additional technical information to respond to questions and concerns raised by foreign delegations. In addition, BIS invited four ISTAC members to attend the summer Wassenaar TWG to support discussions on four foreign proposals related to US-004 (ADC) and to the Plenary Mandate to review entry 3E2 microprocessor technology; two of those four members did

attend. The relatively small number (six) of proposal in 2018 is a significant reduction from the past three years (in which there were ~13 proposals). Moreover, only one of the six proposals was technically substantive; the other five were of a corrective/grammatical nature. We anticipate a larger number of proposals of greater technical substance in 2019. At the date of this Annual Report, the ISTAC has raised and is developing 15 ideas for proposals for 2019: 11 ideas in Category 3A, two ideas in Category 4, and two ideas in Category 5p2. The ISTAC maintained active communication between industry and the interagency in FY2018. ISTAC meetings were well-attended by USG members from BIS, Department of Homeland Security (DHS), Defense Technology Security Administration (DTSA), Naval Research Laboratory (NRL), National Security Administration (NSA) and Department of State (DOS). The ISTAC maintained the Standing Working Groups for each of Categories 3A, Cat 3B/3C, Cat 4, Cat 5p1 and Cat 5p2 were established in July 2008. A new Working Group for Cybertools was established in 2017. These groups remain in place and remain active. The purpose of these working groups is to create a formal structure with which to track activities in each category/subcategory, coordinate responses to BIS, develop Wassenaar proposals, etc. Experience with the working groups has been excellent: Cooperation and communication with the interagency on development of Wassenaar proposals has increased; and ISTAC activities are more clearly understood by meeting attendees, both ISTAC members and non-members. Each of the Working Groups presented reports of their activities at each of the four ISTAC meetings held in FY2018. Additionally, the Cat 4 and Cybertools working groups each held multiple teleconferences among their industry members. The ISTAC continued to provide BIS with timely forecasts of industry technology improvements, product roadmaps, and feedback on proposed regulations. The tradition of technical presentations from subject-matter experts continued. Topics this year included: Wideband Civilian Radar Measurements; Basic Buffer Overflows; HPC Market and Top500; Gallium Nitride; IC Interconnects and Fab Overview; SQL Injection; Foreign Microprocessors; Semiconductor and Device Roadmap (10nm/7nm/5nm); Artificial Intelligence; and Digital Television. There were no industry roadmap presentations. The ISTAC maintained active engagement of technical experts from industry in support of these activities. The ISTAC has 27 industry members, representing Categories 3, 4, 5p1 and 5p2. Promoting broader awareness of other aspects export controls for ISTAC members: We had two presentations on export control topics outside the scope of traditional ISTAC activities: An overview from the National Institute of Standards and Technology on their IoT Cybersecurity Program and Lightweight Cryptography; and an overview from the International Trade Administration on efforts to identify trade barriers in the information and communication technology sector. The ISTAC worked closely with BIS and other agencies in identifying and acting on high priority tasks. Major issues that the ISTAC discussed and/or worked on with BIS were as follows: Wassenaar 2013 Cybertool Regulatory Implementation, Wassenaar Plenary

Mandate for 3E2, and the Advanced Notice of Proposed Rulemaking on Controls on Emerging Technology. Other issues raised to BIS that remain open but that the ISTAC continues to develop are: Export control issues associated with 5G cellular, relaxation of the 744.21 control on oscilloscopes from its current threshold of 2.5 GSa/s (possibly to a value in the range 5-20 GSa/s), based on the existence of indigenous Chinese oscilloscopes. License exception availability for 3E001 technology that pertains to 3A001b2 MMICs and 3A001b3 transistors. Currently there are no license exceptions available for this; the ISTAC is formulating a proposal to for availability of Technology and Software Unrestricted and Strategic Trade Authorization. Foreign Availability argument/study analog-to-digital converters (3A001a5). There is emerging evidence that China is starting to develop indigenous Analog to Digital Converter (ADC) and related technology. If so, this could be reason to relax the ADC control thresholds, to minimize the economic motivation for that indigenous development. The ISTAC work plan for FY2019 is to: Develop Wassenaar proposals for issues related to Categories 3, 4, 5p1 and 5p2, and provide support as necessary for proposals that are advanced to Wassenaar. Maintain close communication and cooperation between industry and the interagency during the review/vetting process of Wassenaar proposals. Maintain the standing working groups for Cat 3A, Cat 3B/3C, Cat 4, Cat 5p1, Cat 5p2, and Cybertools; these working groups provide structure for ISTAC activities. Continue to provide BIS with timely forecasts of industry technology improvements, product roadmaps, and feedback on proposed regulations. Provide BIS with on emerging and fundamental technology. Maintain active engagement of technical experts from industry in support of these activities.

20b. How does the Committee balance its membership?

The ISTAC is composed of representatives of industry and government with specific technical expertise in the areas of semiconductors, computers, and telecommunications. The principal source for the members from industry are firms that export commodities and technology controlled under Commerce Control Lists 3, 4, and 5.

20c. How frequent and relevant are the Committee Meetings?

The ISTAC met three times in FY 2018. It is successfully advising on the export control parameters for three interrelated Control List categories.

20d. Why can't the advice or information this committee provides be obtained elsewhere?

The ISTAC addresses issues relating to Control List Categories 3 (electronics -semiconductor section), 4 (computers), and 5 (telecommunications and information security). Few people possess the technical expertise needed to advise on controls in

these areas. The ISTAC is the only group of its kind directly accessible to Government officials.

20e. Why is it necessary to close and/or partially closed committee meetings?

Closed sessions are held to allow for discussion of information classified for reasons of national security, information the premature disclosure of which would be likely to significantly frustrate implementation of a proposed agency action, or information of a commercial or financial nature that is privileged or confidential.

21. Remarks

Authorized by the Export Administration Act of 1979 (50 U.S.C. app. 2401-2420) as amended by the Export Administration Amendments Act of 1985, P.L. 99-64, 99 Stat. 120 (July 12, 1985). Although the Export Administration Act of 1979 (EAA), as amended, has expired, its provisions and those of the Export Administration Regulations were continued in effect, and to the extent permitted by law, when the President by Executive Order invoked the International Emergency Economic Powers Act.

Designated Federal Officer

Anita Zinzuvadia DFO

Committee Members	Start	End	Occupation	Member Designation
Aitel, David	11/04/2016	11/04/2020	Immunity, Inc.	Representative Member
Anifantis, Constantine	10/22/2014	10/22/2018	IBM CHQ	Representative Member
Brandt, Henry	03/30/2007	11/04/2020	IBM Corporation	Representative Member
Dasari, Ramakrishna	09/14/2016	09/14/2020	Apple, Inc.	Representative Member
Giakouminakis, Anastasios	11/04/2016	11/04/2020	Rapid7, Inc.	Representative Member
Hill, Thomas	06/12/2012	09/14/2020	Tektronix, Inc.	Representative Member
Jones, Thomas	04/03/2015	04/03/2019	Research Electronics International	Representative Member
Kim, Joseph	04/25/2012	09/14/2020	Xilinx, Inc.	Representative Member
Lindsay, David	01/22/2013	05/21/2021	Intel Corporation	Representative Member
Lutz, Michael	04/03/2015	04/03/2019	Google, Inc	Representative Member
Matchett, Noel	04/03/2015	04/03/2019	Information Security, Inc.	Representative Member
Millan, Joshua	09/09/2015	09/09/2019	ViaSat, Inc.	Representative Member
Olsen, Gordon	09/09/2015	09/09/2019	Tektronix, Inc.	Representative Member
Page, Daniel	09/09/2015	09/09/2019	Synopsys, Inc.	Representative Member
Ranganathan, Venugopal	04/03/2015	04/03/2019	Qualcomm, Inc.	Representative Member
Rivera, Hector	06/12/2012	11/04/2020	Texas Instruments, Inc.	Representative Member
Robertson, David	02/03/2012	11/04/2020	Analog Devices, Inc.	Representative Member
Rogers, Jeffrey	01/25/2012	09/14/2020	Applied Materials, Inc.	Representative Member
Tang, Kai	06/01/2016	06/01/2020	Inmarsat, Inc.	Representative Member
Wang, Scott	11/04/2016	11/04/2020	Hewlett Packard Enterprise	Representative Member
Zeoli, Steven	10/22/2014	10/22/2018	IBM CHQ	Representative Member

Number of Committee Members Listed: 21

Narrative Description

Industry input regarding controls on computers, semiconductors and related equipment,

telecommunications, and information security is crucial in developing an export control policy that will maintain competitiveness in the global marketplace while addressing vital national security concerns. In the Information Systems Technical Advisory Committee, the Department of Commerce has a resource as dynamic and imaginative as the industry sectors it encompasses.

What are the most significant program outcomes associated with this committee?

Checked if Applies

- | | |
|---|-------------------------------------|
| Improvements to health or safety | <input type="checkbox"/> |
| Trust in government | <input type="checkbox"/> |
| Major policy changes | <input type="checkbox"/> |
| Advance in scientific research | <input type="checkbox"/> |
| Effective grant making | <input type="checkbox"/> |
| Improved service delivery | <input type="checkbox"/> |
| Increased customer satisfaction | <input type="checkbox"/> |
| Implementation of laws or regulatory requirements | <input checked="" type="checkbox"/> |
| Other | <input type="checkbox"/> |

Outcome Comments

NA

What are the cost savings associated with this committee?

Checked if Applies

- | | |
|----------------------------|-------------------------------------|
| None | <input type="checkbox"/> |
| Unable to Determine | <input checked="" type="checkbox"/> |
| Under \$100,000 | <input type="checkbox"/> |
| \$100,000 - \$500,000 | <input type="checkbox"/> |
| \$500,001 - \$1,000,000 | <input type="checkbox"/> |
| \$1,000,001 - \$5,000,000 | <input type="checkbox"/> |
| \$5,000,001 - \$10,000,000 | <input type="checkbox"/> |
| Over \$10,000,000 | <input type="checkbox"/> |
| Cost Savings Other | <input type="checkbox"/> |

Cost Savings Comments

N/A

What is the approximate Number of recommendations produced by this committee for the life of the committee?

Number of Recommendations Comments

The Committee meets four times per year. There were six recommendations in FY18.

What is the approximate Percentage of these recommendations that have been or will be Fully implemented by the agency?

38%

% of Recommendations Fully Implemented Comments

N/A

What is the approximate Percentage of these recommendations that have been or will be Partially implemented by the agency?

30%

% of Recommendations Partially Implemented Comments

N/A

Does the agency provide the committee with feedback regarding actions taken to implement recommendations or advice offered?

Yes ☒ No ☐ Not Applicable ☐

Agency Feedback Comments

The agency includes the Information Systems Technical Advisory Committee in the process of incorporating the determinations of the various multilateral regimes into the Export Administration Regulations.

What other actions has the agency taken as a result of the committee's advice or recommendation?

Checked if Applies

Reorganized Priorities	<input type="checkbox"/>
Reallocated resources	<input type="checkbox"/>
Issued new regulation	<input checked="" type="checkbox"/>
Proposed legislation	<input type="checkbox"/>
Approved grants or other payments	<input type="checkbox"/>
Other	<input type="checkbox"/>

Action Comments

N/A

Is the Committee engaged in the review of applications for grants?

No

Grant Review Comments

N/A

How is access provided to the information for the Committee's documentation?

Checked if Applies

Contact DFO



Online Agency Web Site



Online Committee Web Site



Online GSA FACA Web Site



Publications



Other



Access Comments

N/A